



# Overlapping Problems

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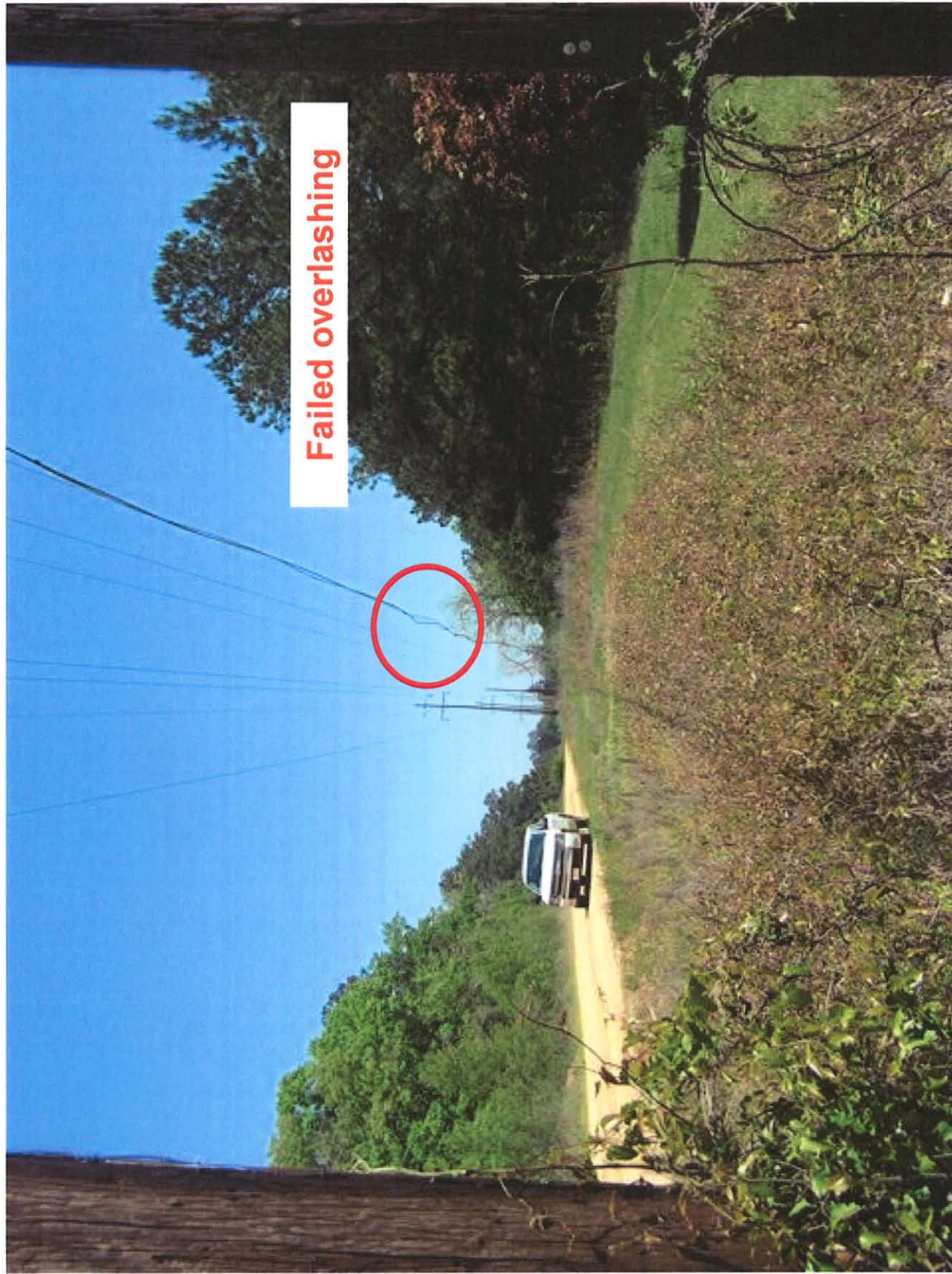


**Failed overlash  
hanging to ground**











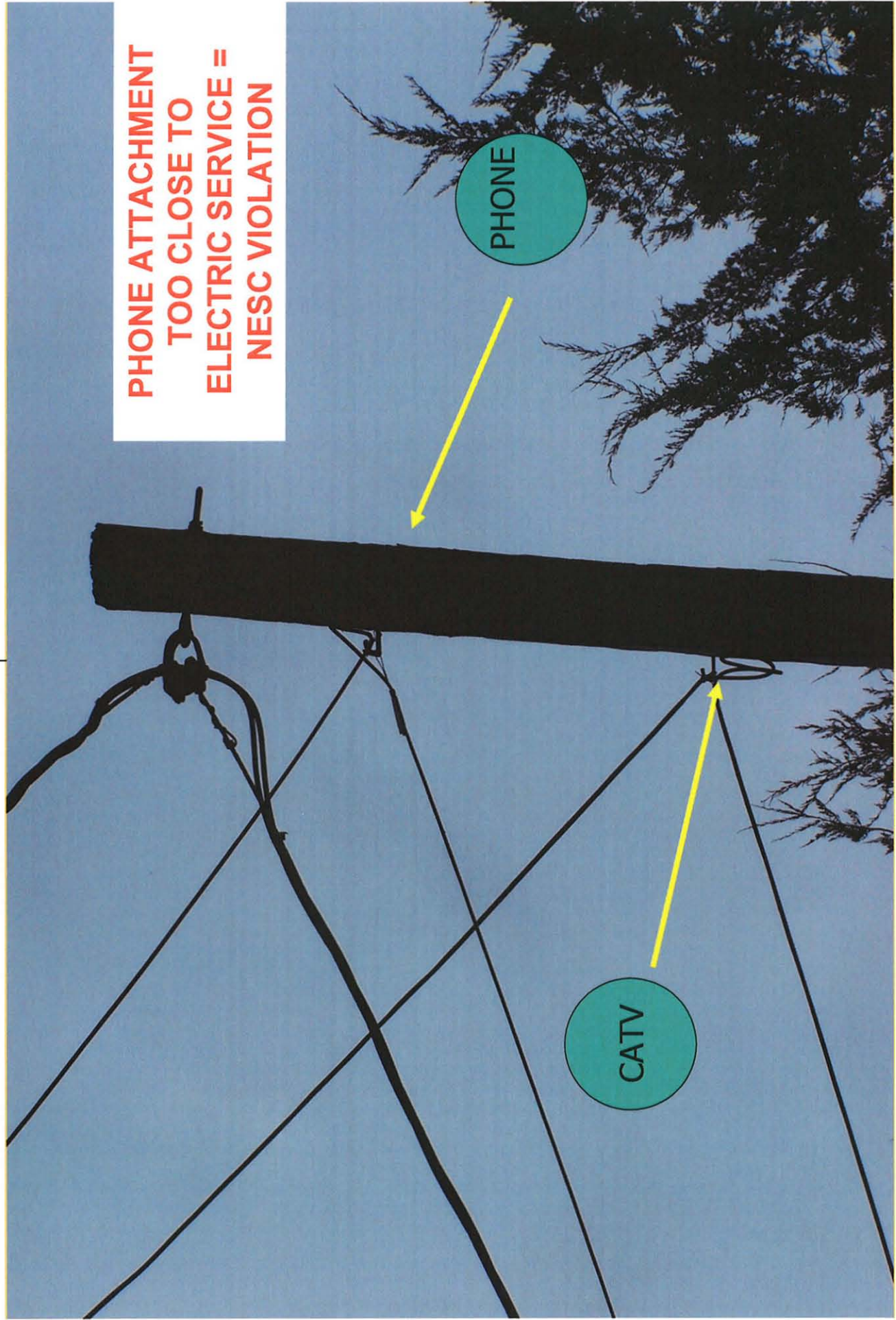


# Spacing and Clearance Violations



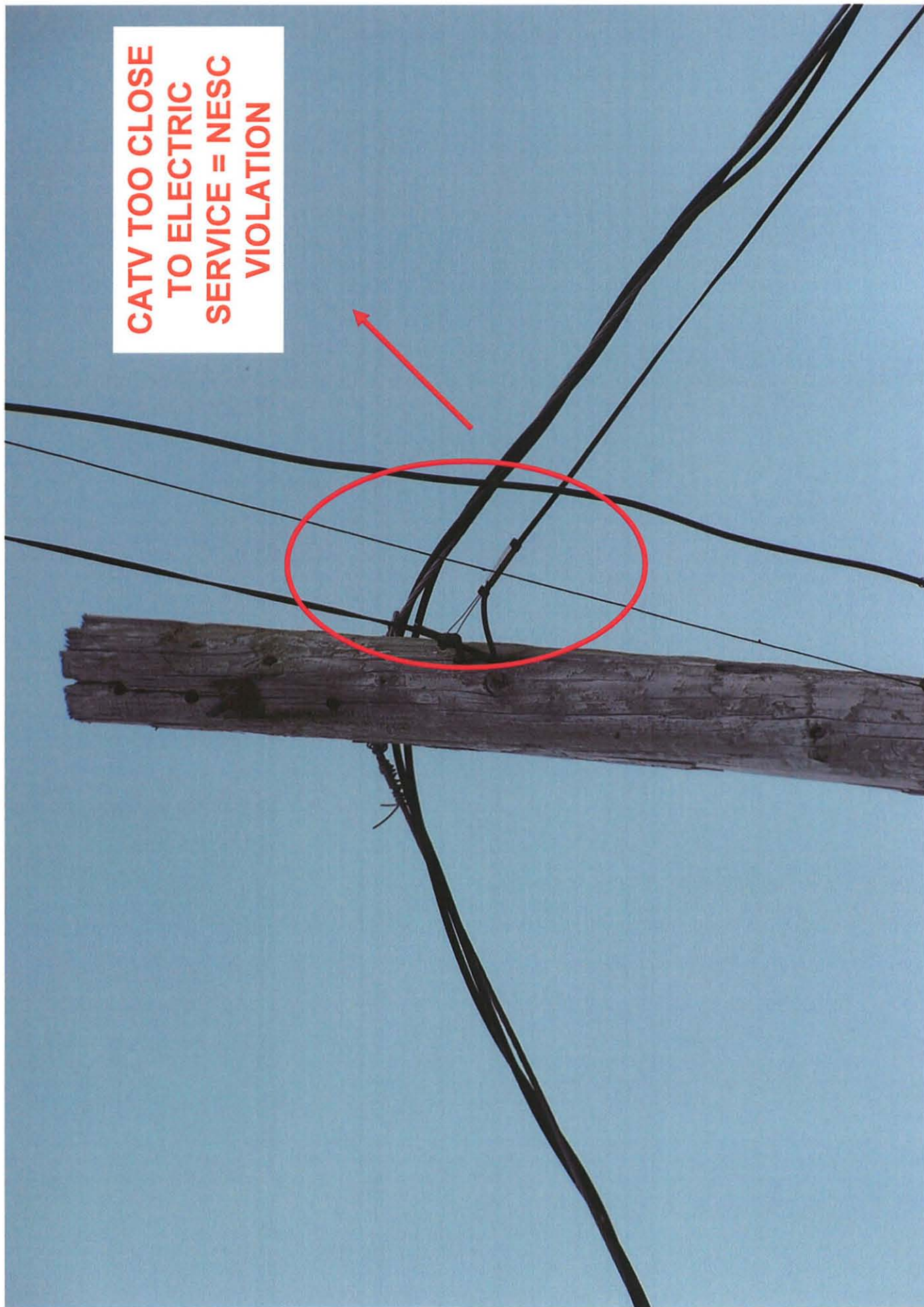


**PHONE ATTACHMENT  
TOO CLOSE TO  
ELECTRIC SERVICE =  
NESC VIOLATION**



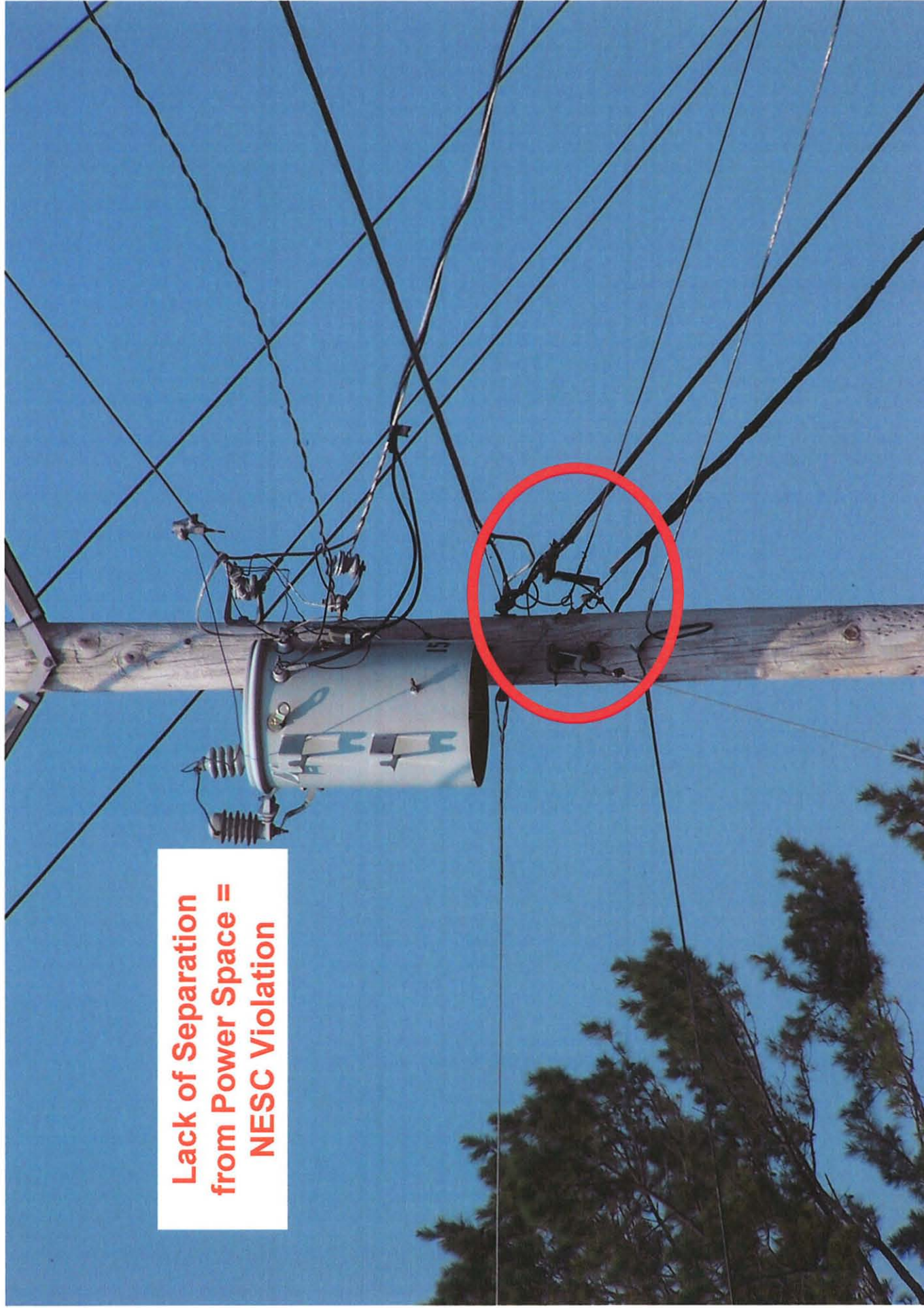


**CATV TOO CLOSE  
TO ELECTRIC  
SERVICE = NESC  
VIOLATION**

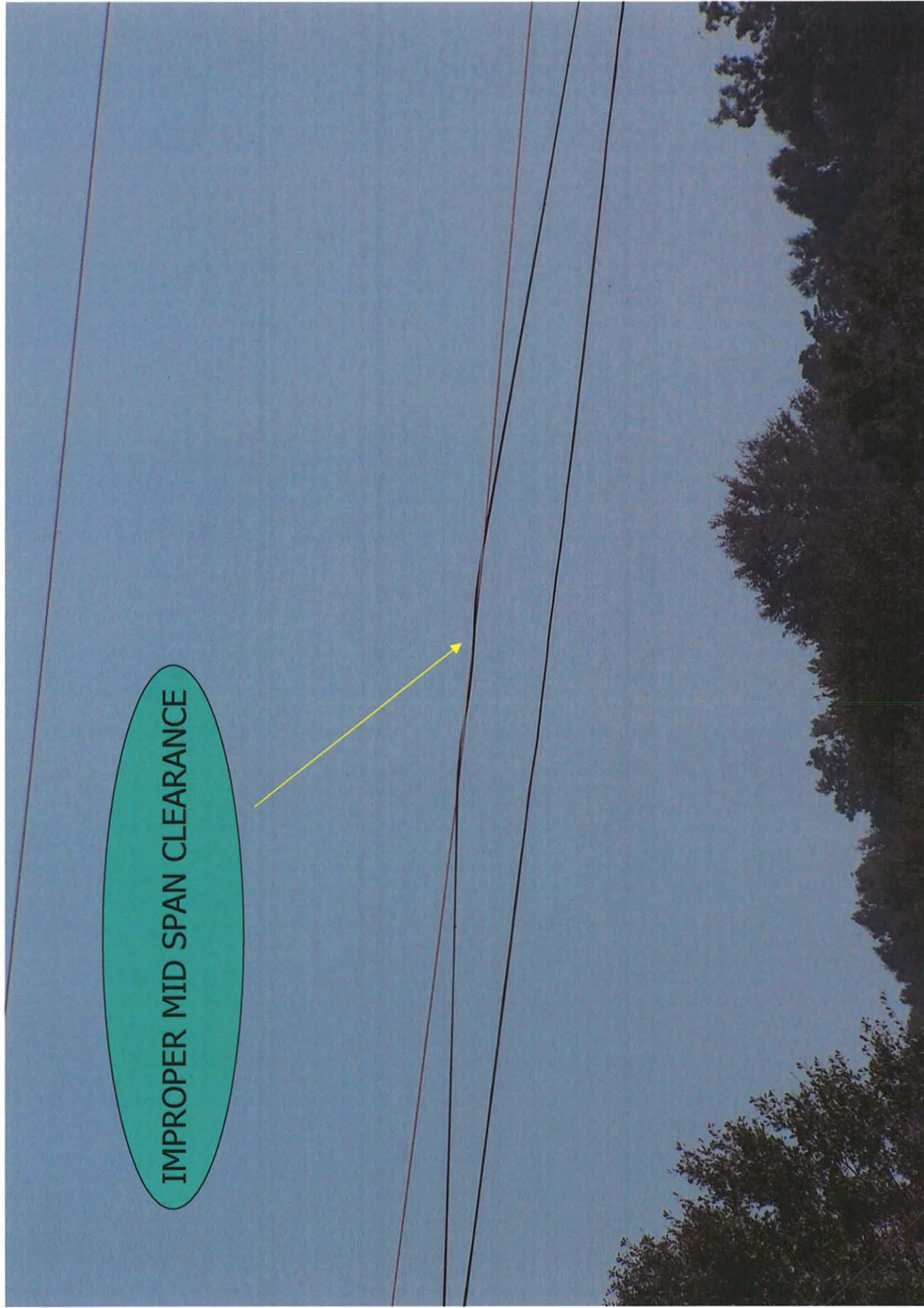




**Lack of Separation  
from Power Space =  
NESC Violation**









**Lack of Separation from  
Power Facilities  
&  
Ground not connected**





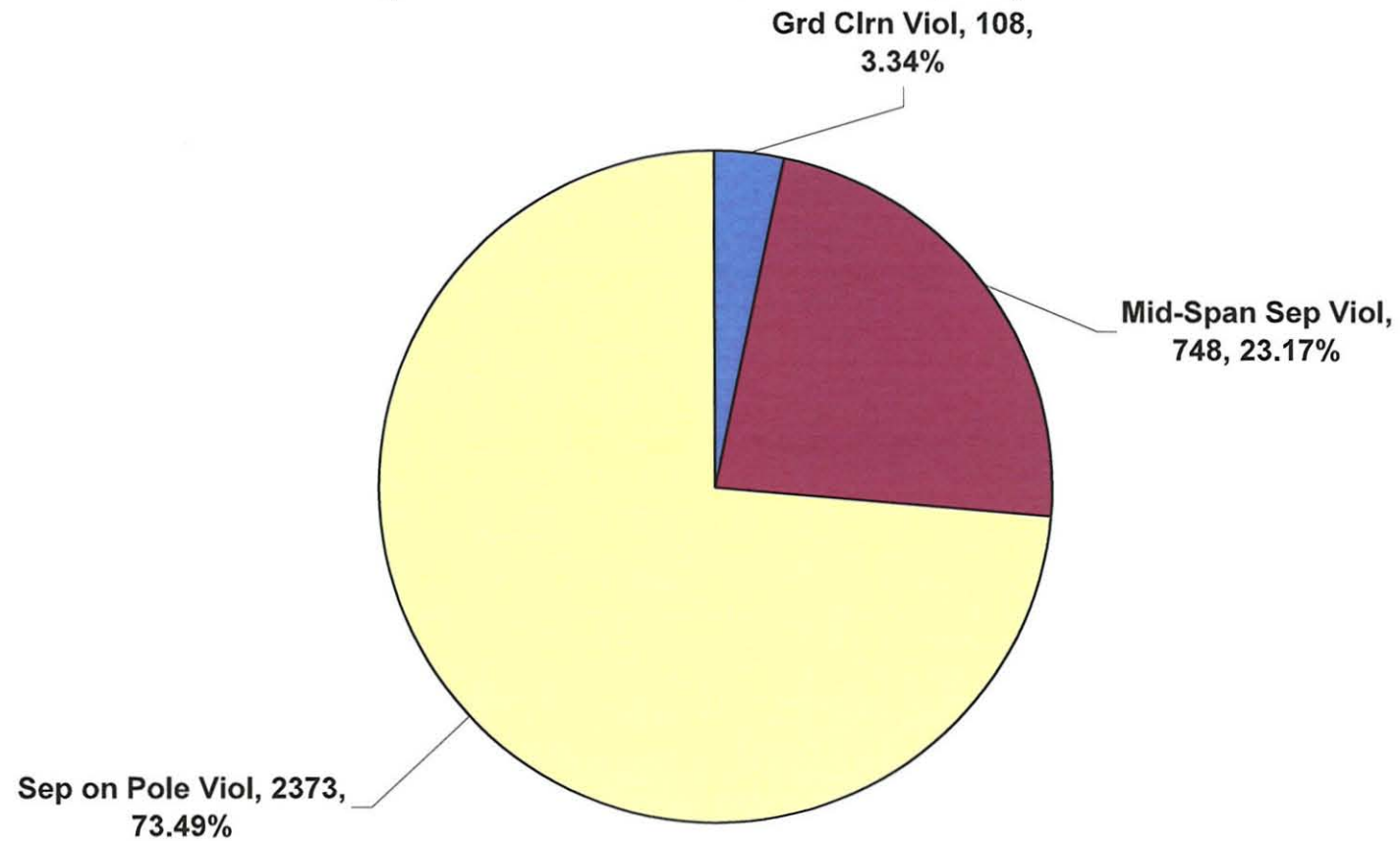




**TAB 3**

### Total CATV Violations By Type

(Total # of CATV Violations = 3,229)



■ Grd Clrn Viol

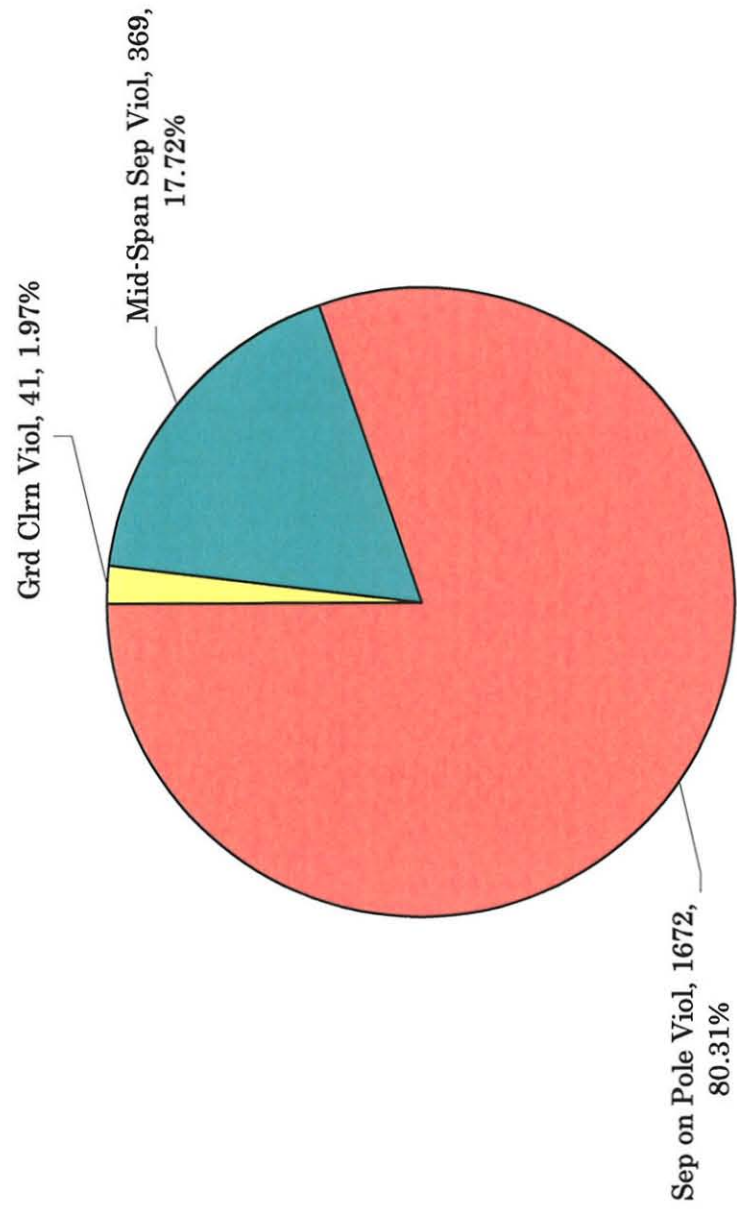
■ Mid-Span Sep Viol

■ Sep on Pole Viol

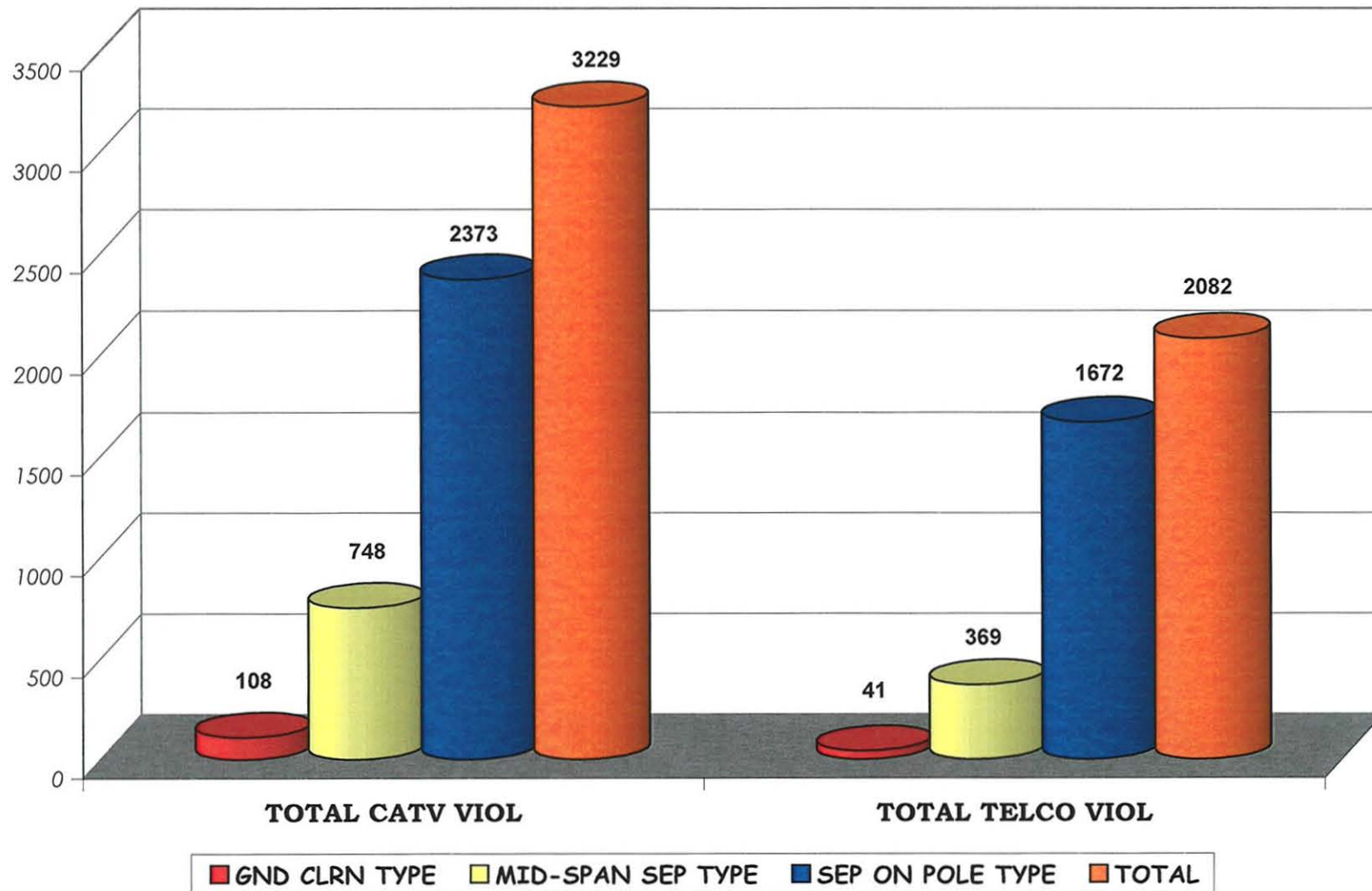


# **TOTAL TELCO Violations By Type**

(Total # of TELCO Violations = 2,082)



### TELCO vs. CATV Violations





# **EXHIBIT B**

**Before the  
Federal Communications Commission  
Washington, D.C., 20554**

In the Matter of	)	
	)	
Implementation of Section 224 of the Act;	)	WC Docket No. 07-245
Amendment of the Commission's Rules and	)	
Policies Governing Pole Attachments	)	RM-11293
	)	RM-11303
	)	

**DECLARATION OF RENE SMITH**

1. My name is Rene Smith, P.E. and I am employed with Sumter Electric Membership Corporation ("Sumter EMC") as its Senior Vice President of Operations. I received a Bachelor of Science Degree in Electrical Engineering Technology from Southern Polytechnic State University in 1988. I have twenty years of experience in electrical power distribution engineering, construction and operations with Sumter EMC.

2. This declaration is based on my personal and professional knowledge, as well as knowledge available to me in my capacity as Senior Vice President of Operations for Sumter EMC.

3. Sumter EMC is a not-for-profit electric utility organized in 1937 and headquartered in Americus, Georgia. Sumter EMC provides energy to more than 19,000 customers in all or parts of eleven counties in Southwest Georgia. Sumter EMC is a member of the National Rural Electric Cooperative Association ("NRECA").

4. Sumter EMC owns approximately 50,000 electrical distribution poles, with more than 12,200 of those poles currently having at least one attachment by an ILEC, CATV or other third-party ("joint use poles"). There are three ILECs attached to Sumter EMC's poles, with the



largest being AT&T with 9,216 attachments. There are three CATV operators attached to Sumter EMC's poles, with Mediacom being the largest at 3,051 attachments.

5. The purpose of this declaration is to present and explain data and pictures evidencing persistent safety violations created on Sumter EMC's electrical distribution poles by attaching entities.

6. Over the past several years, Sumter EMC has witnessed and documented numerous safety code violations created by ILEC and CATV attachers on Sumter EMC's joint use poles. These safety violations include, without limitation, improperly installed, missing or broken anchors; improperly installed, missing or broken guy wires; improper overlashing; improper tension of communication cables or guy wires; failure to maintain proper ground clearance; and failure to obtain required separations from Sumter EMC facilities.

7. Anchors and guys work together and are required to, among other reasons, help balance the load on a pole to which wireline attachments have been made and provide stability, ultimately helping the pole remain upright. In layman's terms, the guy wire balances the tension created by the wireline attachment seeking to pull the pole in a direction opposite the guy wire. Anchors and guy wires are critical components of the safety of individual poles, and pole lines. If the poles cannot remain upright and straight, they cannot do their job.

8. Some of the more common problems Sumter EMC has experienced regarding anchors installed by attachers include anchors that are not large enough for the soil type; anchors that are installed too close to the pole; anchors installed too close to Sumter EMC's anchors; and anchors that are not installed in-line with the pull of the guy wire. Each of these practices violates one or

more of the construction specifications set forth by Sumter EMC, the National Electric Safety Code (“NESC”), or Rural Utilities Service (“RUS”).

9. When an anchor is too small for the soil type, its holding power to protect the stability of the pole is lost or reduced. In soft or loose soils such as those commonly found in South Georgia, larger anchors must be used to maintain holding power. Unfortunately, Sumter EMC regularly finds that attachers install anchors that are not in compliance with NESC or RUS standards, and are too small to maintain holding power in the South Georgia soil. *See* NESC § 264 (Guying and Bracing).

10. When an anchor is improperly installed, it often cannot perform as expected or required. Examples of improper installation of anchors by attachers that Sumter EMC has experienced include using unsuitable gas-powered or air driven impact hand tools used in place of a derrick truck. These hand tools are not suitable for installation of the large anchors required to be driven into the ground at a sufficient depth to hold the loads of large cables in sandy soil. *See* NESC Handbook, 6<sup>th</sup> Ed., §264(f). As a result, the anchors installed with this unsuitable equipment are more likely to not be of a sufficient depth, and as a result are more likely to fail.

11. Another frequent problem seen in Sumter EMC’s service territory is CATV or ILEC anchors improperly placed too close to the base of the pole. *Id.* This unacceptable placement results in extreme tension on the guy wire to which the anchor is attached, and in many cases leads to pole deflection (*i.e.* causes the wooden pole to bend). This extreme tension also can lead to pole failures in storms.

12. Similarly, when CATV or ILEC anchors are installed without observing the required five feet of separation between them and the Sumter EMC anchors (*see* RUS Guide Drawings E2.2G



and E2.3G), both anchors can fail. Anchors installed without the requisite separation are often pulling upward on the same cone-shaped volume of soil, which results in significantly less holding power for the two anchors than would be available if the anchors are properly installed with sufficient separation. This again is a problem frequently seen in Sumter EMC's territory.

13. Sumter EMC's joint use agreements, and good engineering practice, require prior approval by Sumter EMC for any additional guy attachments to existing anchors. Sumter EMC is the only party able to perform a complete pole loading analysis (assuming all attaching parties submit the necessary technical data for their attachments to poles) for its poles. Any attempt on the part of CATV or ILEC attachers to determine power company anchor loading and available capacity will be inaccurate, as the CATV and ILEC attachers do not have adequate technical data to calculate the tensions on power company (and third party) conductors, guys, and anchors (including the size and holding power of the existing power company anchor). An attacher's guy wire installation creates more harm than good to a pole when it is inappropriately attached to an existing Sumter EMC anchor without the permission of Sumter EMC. This improper installation by CATV or ILEC attachers is too often found in Sumter EMC's territory. The attacher making such a connection does not take into account the preexisting tension on the anchor, and the holding power of that anchor in the soil. In short, that anchor can be more than adequate to perform as intended by Sumter EMC, but be wholly inadequate to withstand the additional stress now assigned to it by the attaching entity. Failure of the anchor to support the additional load imposed by the attacher's guy wire can result in catastrophic failure of the pole.

14. Undue stress is also placed on Sumter EMC's poles and the attached anchors due to overlashing conducted by CATV or ILEC attachers. In simple terms, overlashing increases the messenger cable tension on a pole due to the increased cable weight, and also increases wind and

ice loading factors by doubling/tripling the diameter of the cable. This increases both the vertical pole load and the tension on the installed anchors and guy wires. Unless notification is given of the overlashing project, allowing the pole load to be analyzed and recalculated to account for the increased tensions, the overlashing can create conditions leading to pole failures.

15. Improperly installed guy wires are another common problem caused by CATV or ILEC attachers. In many cases, Sumter EMC finds that an improperly installed guy wire compromises the safety of a pole by failing to adequately counterbalance the tension created by the CATV or ILEC wireline attachments. This recurring failure by attachers to properly install guy wires is a frequent cause of pole failure during storm events.

16. Attached as Tab 1 are photographs showing examples of improperly installed CATV or ILEC anchors, guy wires and cables. As explained above and on the photographs themselves, these photographs show, among other problems or violations, pole deflection caused by improperly installed anchors or guys; improper “Manta Ray” anchors installed in loose, sandy soil; improper attachment of attacher guy wires to Sumter EMC anchors; and improper tension of cables or guy wires.

17. One byproduct of the attaching entities utilizing improper anchors and guy wires is that some attached cables are unable to establish or maintain the required clearance over public highways. Attached as Tab 2 are photographs showing where an ILEC-installed anchor and guy wire had insufficient holding power to stabilize the pole, allowing the ILEC line to sag over Highway 27 in Cusseta, Georgia. This sag resulted in a tractor trailer truck striking a low ILEC cable. In this instance, Sumter EMC had installed a taller pole next to an existing pole to provide additional ground clearance for an unauthorized ILEC attachment across Highway 27. An ILEC



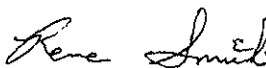
anchor was the sole remaining anchor on the pole after Sumter EMC installed the taller pole and transferred all Sumter EMC facilities to the new pole. However, the ILEC had not yet transferred its facilities. In the meantime, the older, shorter pole on the right side of the photograph that should have been sufficiently anchored by the ILEC guy and anchor began to lean, causing the ILEC cable to sag over the highway at an improper height.

18. The NESC requires that guys be installed as near as practical to the center of the conductor load to be sustained. *See NESC* § 264 (Guying and Bracing), ¶ C. The NESC further provides that guys are intended to limit increase of sags in adjacent spans and provide sufficient strength for unbalanced loads. *Id.* at ¶ A. Sumter EMC guys are installed near the center of power facility loads, and ILEC or CATV guys should be installed near the center of ILEC or CATV loads. Each parties' guys are intended to support their own unbalanced loads on any given structure. If ILEC or CATV guying and anchoring is in accordance with the NESC, removal of Sumter EMC's conductors and guys should not result in failure of the guy that remains on the pole. Obviously that is what happened in this instance.

19. I do not believe that a uniform set of specifications would work in a single state, much less on a national basis.

20. Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the facts set forth in this declaration are true to the best of my knowledge.

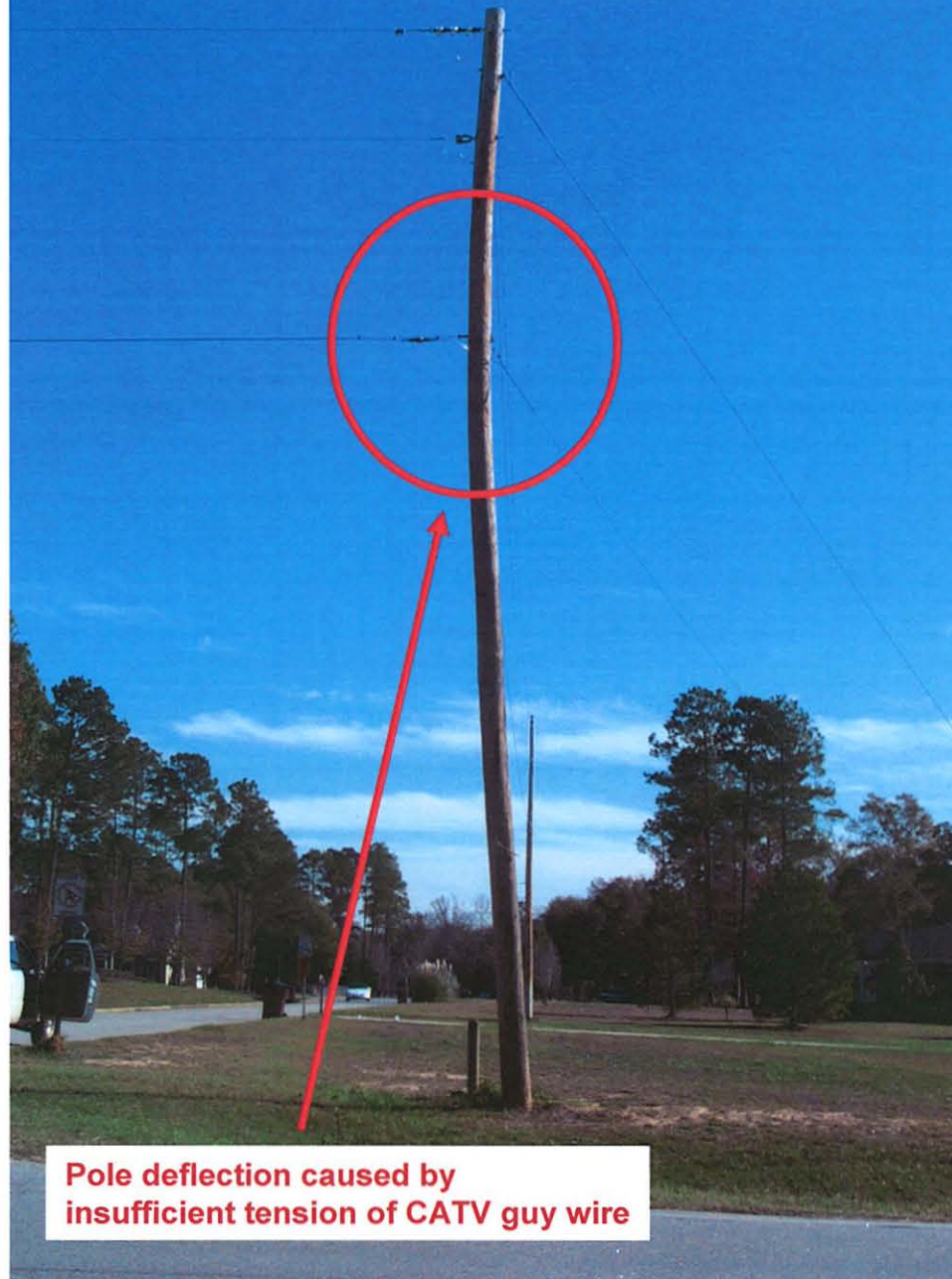
Executed on the 21st day of April, 2008.

  
\_\_\_\_\_  
Rene Smith, P.E.  
Senior Vice President of Operations, Sumter EMC

**TAB 1**



**Date of photograph: 12/19/2001**  
**Location: Lover's Lane at Johns Drive, Leesburg, Ga.**



**Pole deflection caused by  
insufficient tension of CATV guy wire**

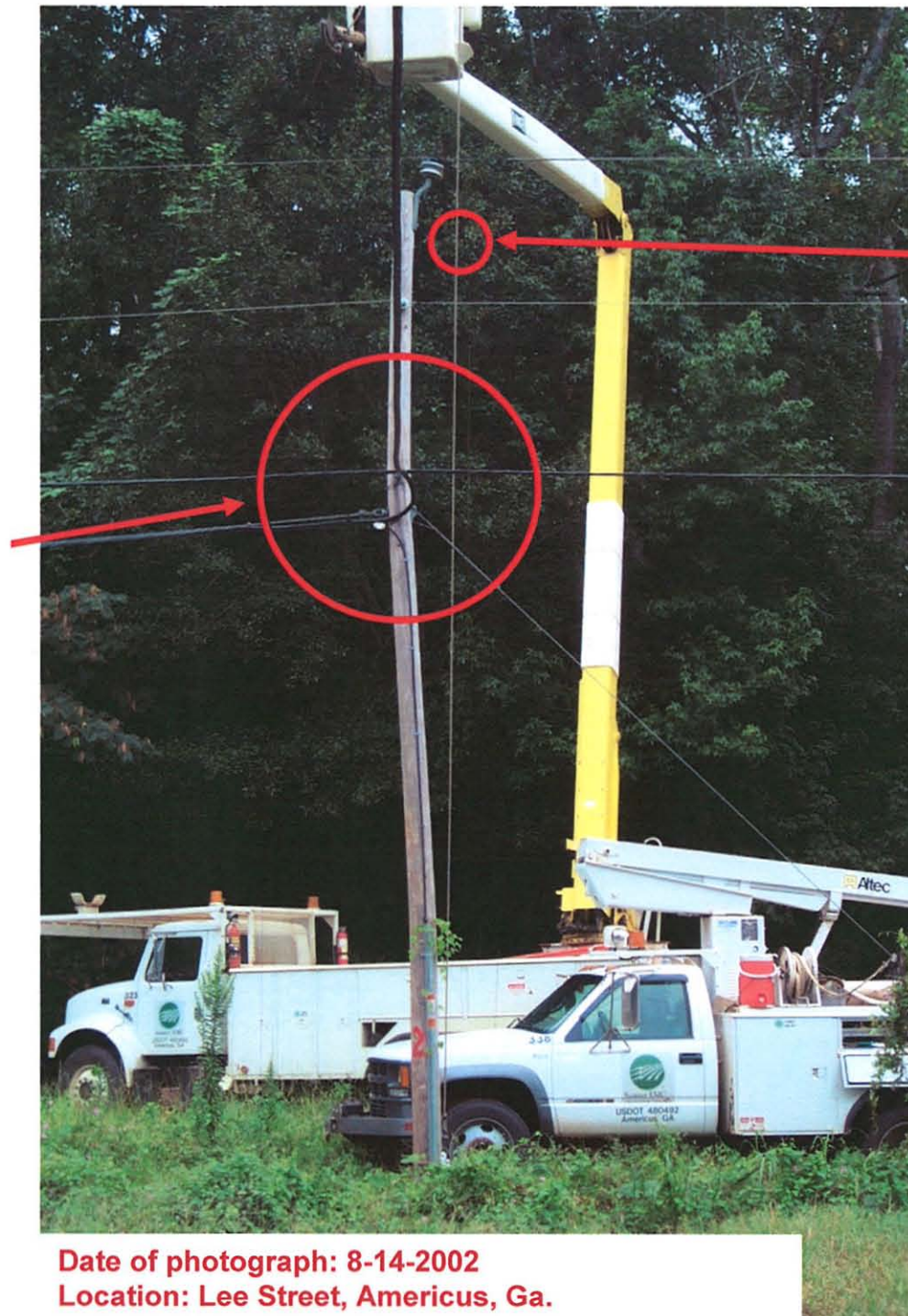
Pole deflection  
caused by  
improper ILEC  
guying and  
anchoring



Date of photograph: 4/23/2002  
Location: Friendship Rd, Southeast of Cusseta, Ga.



Pole deflection caused by improper installation of communication anchor in sandy soil



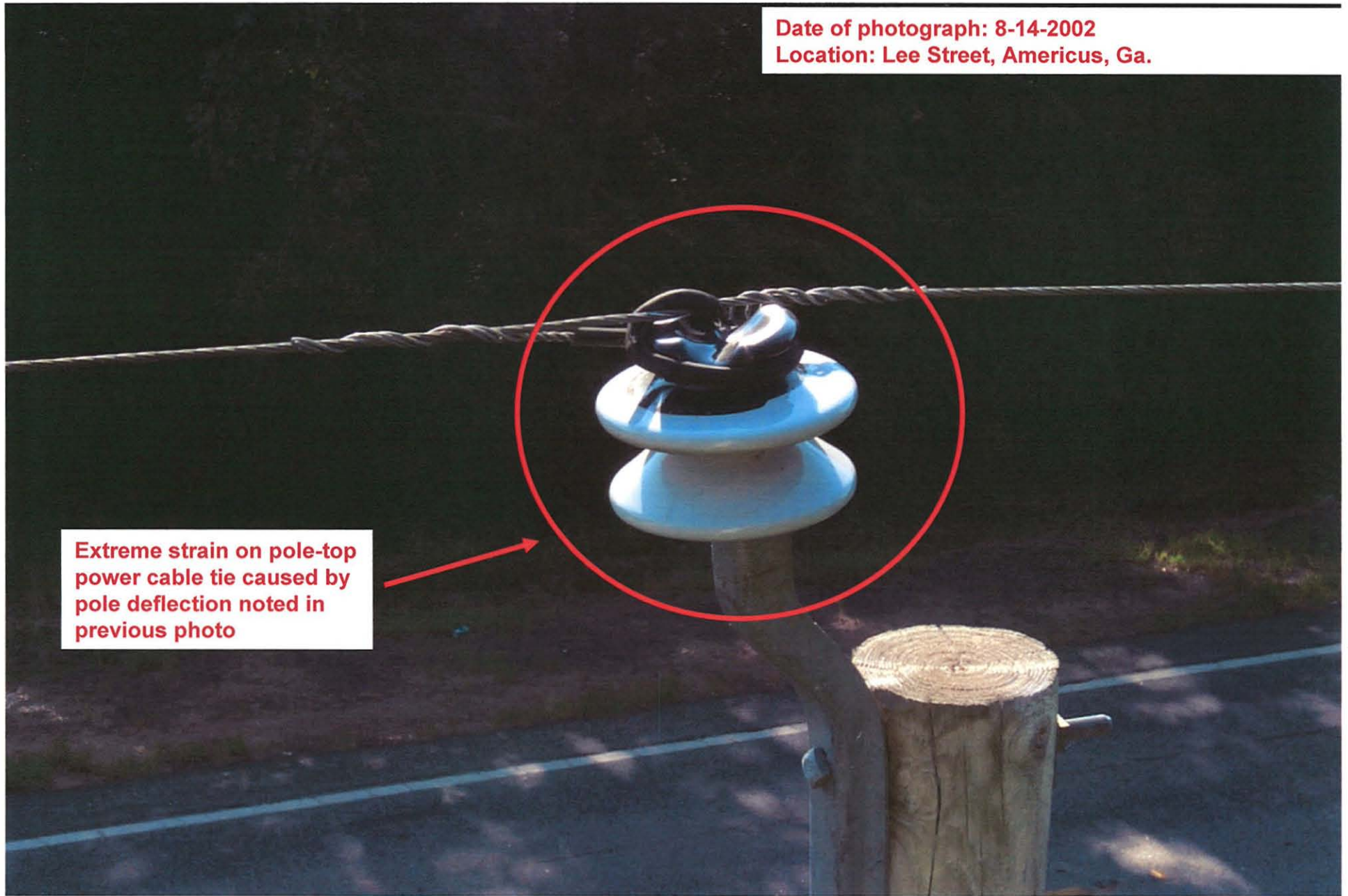
Vertical rope showing upright position pole should be in

Date of photograph: 8-14-2002  
Location: Lee Street, Americus, Ga.



Date of photograph: 8-14-2002  
Location: Lee Street, Americus, Ga.

Extreme strain on pole-top  
power cable tie caused by  
pole deflection noted in  
previous photo

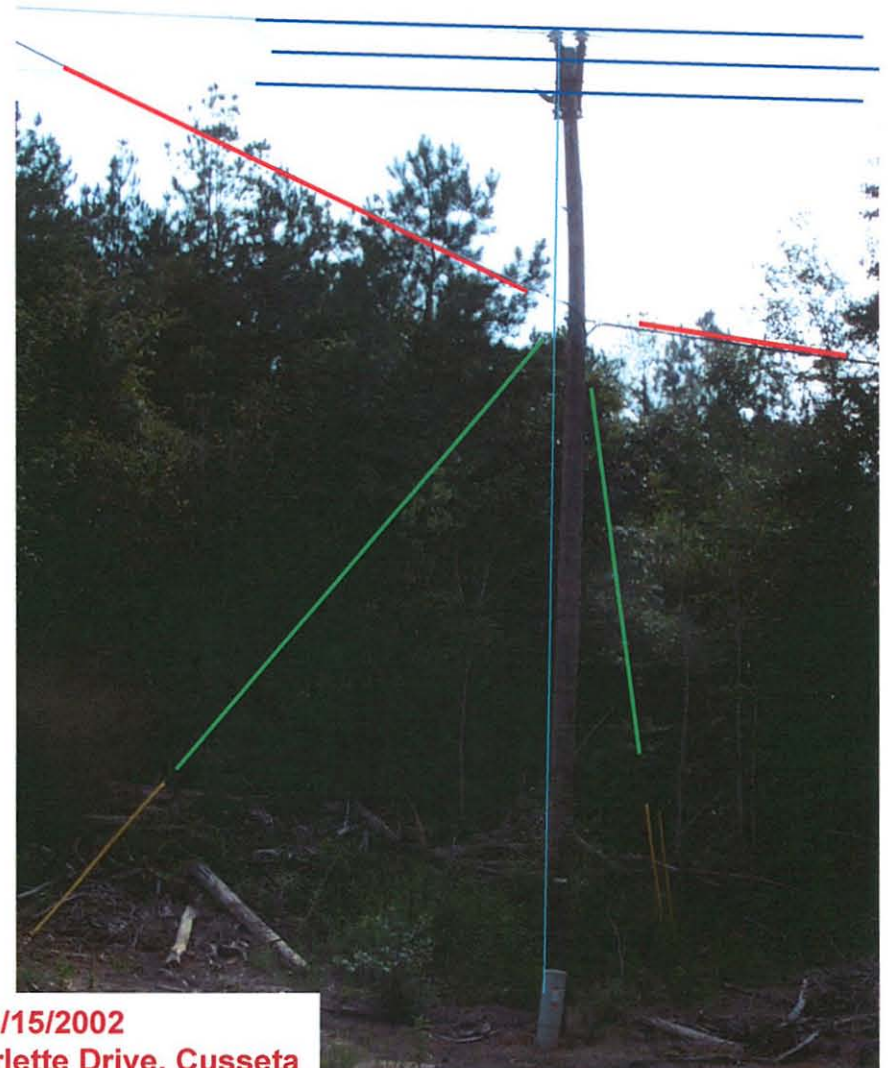
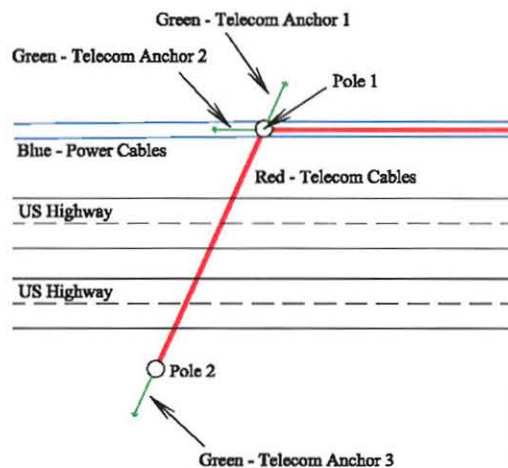


# Pole Deflection – 6 months after Construction of Power Pole Line

Power pole with telephone cable crossing 4-lane highway

Joint use cables were installed within a few weeks of the initial installation of the pole (red highlight) with improper guying and anchoring (green highlight). Resulting deflection of pole can be observed in photograph (light blue line shows position pole should be in).

(Pole 2 not shown in photograph)



**Date of photograph: 8/15/2002**  
**Location: US27 at Marlette Drive, Cusseta**



# Pole Deflection – 9 months after Construction

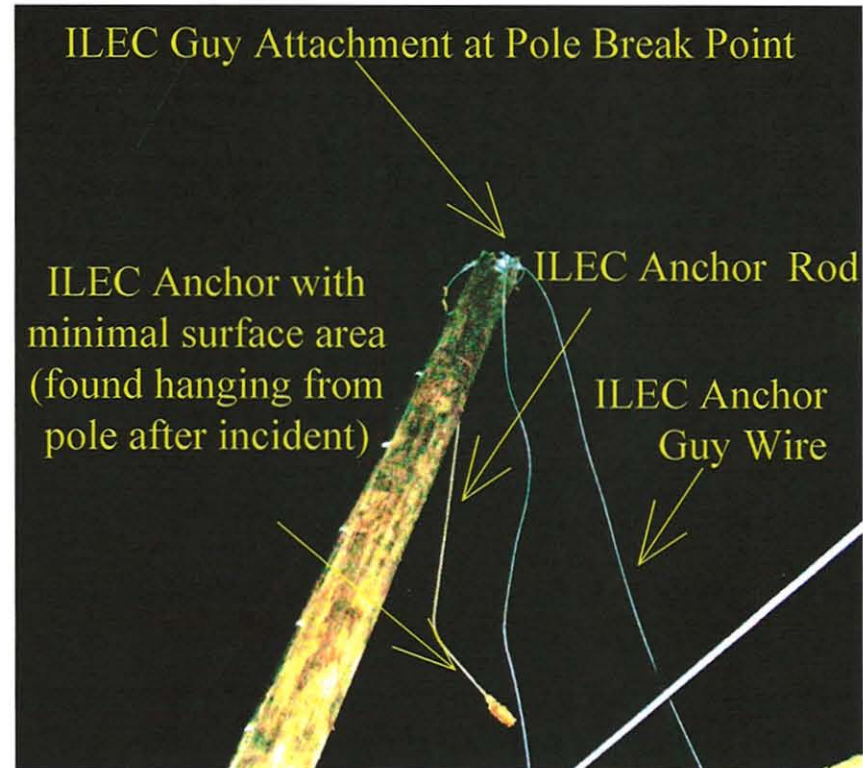
Photo of pole 1 from the previous slide after a dump truck contacted the sagging communications cable crossing a 4-lane highway.

ILEC anchor #1 can be seen hanging from the pole top. (broken pole is leaning, but still standing)

The ILEC anchor and rod had minimal holding power in the sandy soil and they were pulled from the ground with sufficient speed to contact the overhead 25kV power line

ILEC Anchor #2 was pulled clear of the earth after the pole was broken and the full tension of telephone cables was applied to ILEC Anchor #2 (after pole was broken, power cables no longer helped hold the pole in place below the break point)

ILEC Anchors 1 and 2 are 'Manta-Ray' anchors which have little holding power in loose soils



Date of photograph: 11/05/2002  
Location: US27 at Marlette Drive, Cusseta, Ga.